

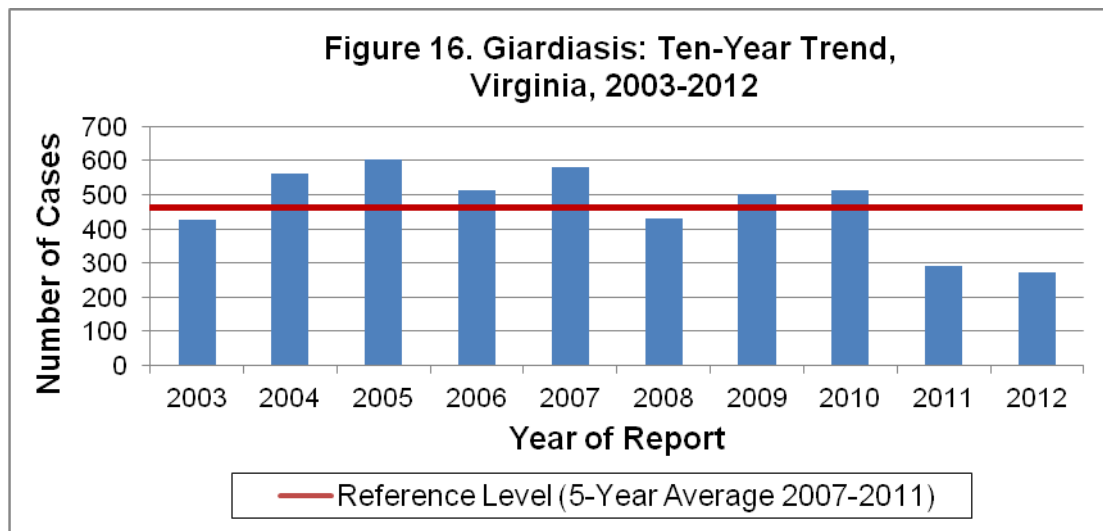
Giardiasis

Agent: *Giardia intestinalis* (parasite)

Mode of Transmission: Person-to-person transmission by hand-to-mouth transfer of cysts from the feces of an infected person. Localized outbreaks are more often due to ingestion of cysts in fecally-contaminated drinking and recreational water (e.g., lakes, rivers, springs, ponds, and streams) than from fecally-contaminated food.

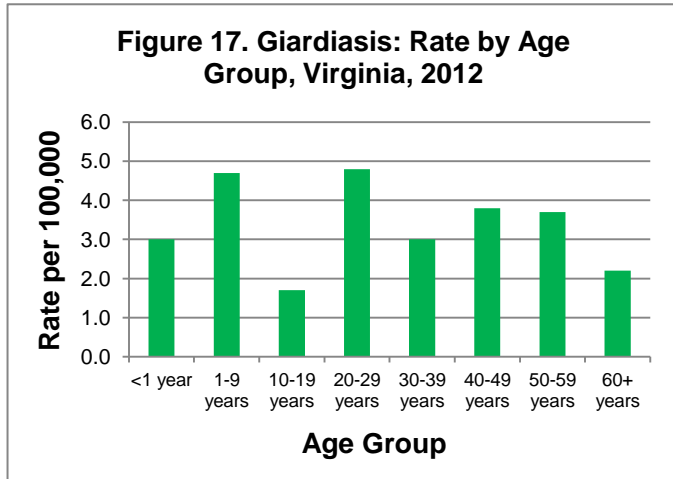
Signs/Symptoms: Symptoms may include diarrhea, abdominal pain, bloating, nausea and vomiting. A person may be asymptomatic or develop chronic illness.

Prevention: Hands should be washed carefully after using the bathroom, after changing diapers or cleaning a child who has used the bathroom; after handling animals or their feces; and before preparing and eating food. Recreational water or untreated water from shallow wells, lakes, rivers, springs, ponds or streams should not be consumed. Persons with diarrhea should not swim at recreational water venues.

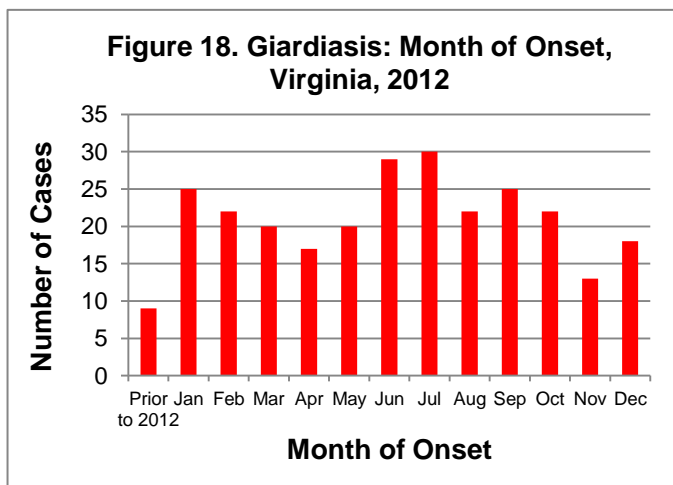


During 2012, 272 cases of giardiasis were reported in Virginia. When examining the number of cases of giardiasis reported over a ten year period (Figure 16), it becomes evident that the 2003-2010 disease pattern differs significantly from that seen in 2011-2012. The average number of cases reported per year was 516.7 for 2003-2010, but 281.0 for 2011-2012. This decrease can be attributed to a change in case definition. Prior to 2011, surveillance case counts included anyone with a positive laboratory result for *Giardia*. Beginning in 2011, documentation of clinically compatible illness was required in addition to a positive laboratory result for a case to be counted for public health surveillance purposes.

While the 20-29 year age group had the highest incidence with 4.8 cases per 100,000, the 1-9 year age group had a similar rate (4.7 per 100,000) (Figure 17). Incidence rates for infants and those in the 30-39, 40-49, and 50-59 year age groups were in the 3.0 to 3.8 per 100,000 population range, while the rates for 10-19 year olds and persons 60 years of age and older were lowest. Race was not reported for 61% of giardiasis cases in 2012. Among those cases with information on race, rates were very similar in each of the three race categories, ranging from 1.3 to 1.4 cases per 100,000. A higher rate was seen among males (4.2 per 100,000) than females (2.5 per 100,000).



With 115 cases, the northern region experienced the largest proportion of cases and highest incidence rate (5.0 per 100,000), followed by the northwest region (48 cases, 3.8 per 100,000). The remaining three regions had similar rates, ranging from 2.1 to 2.6 cases per 100,000 population. Cases occurred throughout the year, with a slight peak in June and July (Figure 18).



While the source of exposure for sporadic cases cannot usually be determined, 113 (42%) of the persons reported to have giardiasis in 2012 had traveled prior to illness onset, 91 (33%) reported contact with an animal, 54 (20%) had recreational water exposure, 42 (15%) knew of similarly ill persons, and 24 (9%) had consumed untreated water. No outbreaks were attributed to *Giardia* during 2012.